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Amendments to the Specification:

[0001] The invention relates to communications networks and, more particularly, to methods and devices for determining the performance of network segments in an Multi-Protocol Label Switched (MPLS) network.

[00024] With the network 10 as illustrated in Figure 1, previously suggested solutions to the problem outlined above would only be capable of determining end-to-end performance between an ingress LSR and an egress LSR of an LSP. If the LSP was a path from LSR0 to LSR3, with the LSP passing through LSR1 and LSR2, then only the performance for the whole path through LSR1 and can be found. The isolation of any faults in that path is not possible. Thus, if the node 180 were to fail, then a user would only know that the LSP between LSR0 and LSR3 has failed and that user would not be able to isolate the problem to any specific portion of the path.

[00037] Referring to Figure 3, a possible format for MPLS DTUs is illustrated. As can be seen, a PPP (Point-to-Point Protocol) field 300 provides for data related to the PPP protocol while a transport label field 310 and a service label field 320 allows the DTU to be used in an MPLS domain. The contents of the transport label field 310 determines the routing of the DTU while the contents of the service label field 320 determines the service or processing provided to the DTU. The OAM label field 325 carries an OAM label which signals to the destination node that it is an OAM DTU. The inclusion of this field is in accordance with the document ITU-T.1711. The payload 330 contains any data to be transported while the CRC field 340 provides error correction for the DTU. If the DTU is to be used as an OAM DTU, then any data which may be needed by an OAM DTU may be ~~laced~~ placed in the payload field 330. The OAM wrapper discussed above would be evidenced by an OAM label in the OAM label field 325. An OAM capable LSR which processes the DTU would recognize the specialized OAM label and process the DTU accordingly. Non-OAM capable nodes (such as nodes 140, 150 in Figure 1) would not recognize the specialized OAM label and would merely forward the OAM DTU to the next node.